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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,707	03/29/2004	Takashi Shiraishi	036741-0131	9057
22428	7590	10/17/2005	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			KHATRI, PRANAV V	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/810,707

Applicant(s)

SHIRAISHI, TAKASHI

Examiner

Pranav V. Khatri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 6-13 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/29/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Restriction***

Applicant's election without traverse of species (a)(Fig 1-10, and Claims 1-5, and 14) in the reply filed on September 6, 2005 is acknowledged.

### ***Specification***

The disclosure is objected to because of the following informalities: (1) Fig 3, Numeral 39 is not mentioned in the specification. Furthermore, applicant is requested to go over the entire specification to revise any deficiencies. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Omura (US Patent 6,229,656).

Regarding claim 1, Omura discloses an optical multi-beam scanning device (see Omura Fig 3), comprising: a plurality of light sources (101A-101D); deflecting means (5) for deflecting light beams from the light sources; post-deflection optical means (30) for making the light beams deflected by the deflecting means enter a surface to be scanned in a vertical scanning direction with respect to a normal direction of the surface to be scanned at a predetermined angle; horizontal synchronization detecting means (23) for synchronizing the light beams in a horizontal scanning direction; and optical path folding means (25) for folding the light beams, directing towards the surface (23) to be scanned, to the horizontal synchronization detecting means (23), a light receiving surface of the horizontal synchronization detecting means is tilted (numeral 23 and its surface is tilted with respect to the scanning directions, as seen in Fig 3) so as to output a horizontal synchronized signal when the light beams come to the same position on the surface to be scanned in the horizontal scanning direction (horizontal sync device is designed for this purpose).

Regarding claim 2, Omura discloses wherein the light receiving surface of the horizontal synchronization (23) detecting means is tilted in the vertical scanning direction at an angle equivalent to that of the surface to be scanned (Col 9 Lines 41-44, the horizontal sync 23 can be adjusted to be tilted in the vertical).

Regarding claim 3, Omura discloses wherein when a tilting direction of the light receiving surface of the horizontal synchronization (23) detecting means is assumed to be in a plane formed in the vertical scanning direction and the horizontal scanning direction, and the tilting angle (23 can be adjusted) is a direction such that the horizontal synchronized signal is output when the light beams are on the same position on the surface to be scanned in the horizontal scanning direction (Col 9 Lines 41-44, the horizontal sync 23 can be adjusted to be tilted or be in a plane formed in the vertical or horizontal scanning direction).

Regarding claim 4, Omura discloses wherein a tilting angle (Col 9 Lines 41-44) of the light receiving surface of the horizontal synchronization detecting means (23) includes the horizontal scanning direction (as see in Fig 3), the vertical scanning direction, and a direction perpendicular to the horizontal scanning direction and the vertical scanning direction (Col 9 Lines 41-44, numeral 24 can be adjusted in the horizontal, vertical, and a direction perpendicular to both).

Regarding claim 5, Omura discloses wherein a relationship among wavelengths of the light beams from the light sources (101A-101D) is set so that their moving amounts in the horizontal scanning direction with respect to a deflecting angle are uniform (Col 6 Lines 15-21 and Lines 40-44), an optical element (25) for changing an

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emitting angle according to a fluctuation in the wavelengths of the light beams emitted from the light sources is arranged on an optical path between the deflecting means (5) and the horizontal synchronization detecting means (23).

Regarding claim 14, Omura discloses a photoreceptor (58) having a surface to be scanned on which latent images are formed based on light beams from the optical multi-beam scanning device (Col 3 Lines 31-36 and Lines 48-52).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pranav V. Khatri whose telephone number is 571-272-8311. The examiner can normally be reached on M-F, 8:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pranav Khatri  
Examiner  
Art Unit 2872  
10/05/2005

**EUNCHA P. CHERRY**  
**PRIMARY EXAMINER**

**EUNCHA P. CHERRY**  
**PRIMARY EXAMINER**